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EXAMINER

MADAMBA, GLENFORD J

ART UNIT

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2151

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/822,347	Applicant(s) PEARSON ET AL.	
	Examiner Glenford Madamba	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 24-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) -12 and 24-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Applicant's latest submission filed on June 20, 2008 has been entered.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 20, 2008 has been entered.

Response to Remarks

1. With respect to Applicant's latest submission, the Office has given full consideration to the arguments and remarks, but is considered unpersuasive to overcome the current rejection of the pending claims in view of the applied prior art reference(s).

Regarding the rejection of the claims, and claim 1 in particular, Applicant firstly argues that the combination of Smith and Gilbert fails to teach or disclose “accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process”. In support of his argument, Applicant argues that while Gilbert discloses ‘logs’ and Smith discloses ‘exploited messages’, there is no teaching within Gilbert and Smith to suggest or support that “a log can be accessed to determine if the message failed to process previously”. Applicant contends that even “while the Office Action states that control records are updated based on information whether processing of a message is ‘complete’, the fact that a message is ‘complete’ fails to identify whether the message previously failed to process. A message can be awaiting processing, but have no previous failures, or a message could be processed completely, but have had a previous failure”. The Office respectfully disagrees and submits that applicant has misinterpreted and/or not fully considered all of the teachings and disclosures of the prior art reference.

In response to the argument, the Office firstly notes that the recited feature of “de-featuring” of a message according to a first rule, such as a determination or identification that a message possibly contains an ‘exploit’ or is ‘poisonous’, is expressly disclosed by Smith, and at least this much is acknowledged by Applicant. However, with regards to Applicant’s contention that “there is no teaching within Gilbert and Smith to suggest or support that a log can be accessed to determine if the message failed to

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process previously”, the Office respectfully disagrees and remarks that Gilbert discloses as his invention the following:

“A system and method for interfacing external processes to a *transaction processing system (180)*[Figure 1]. An interface system is provided that accepts input messages from external processes wherein in the ‘input messages’ are to be ‘processed’ by a transaction processing system. The interface system “logs” received messages and notifies the transaction processing system that a message has been received for processing. The interface system sends a confirmation to the external process indicating that the message has been received. The interface system periodically examines the “status” of each message (e.g., processing status message 150) [Fig. 2] as it is being processed by the transaction processing system. Output status messages indicative of such status are created, stored, and sent to an external destination for informational purposes. Outbound data messages are created, stored and sent to an external application.” [Abstract][Figs.1,2&6]

In this regard, Gilbert additionally teaches that “once a message is received by an input receive module, the message is logged in a log file as a ‘control record’ for that message” [col 3, L45-48] and that “confirming receipt of a message from an external application would allow the external application to maintain an ‘awareness’ of the status of the message sent to the transaction processing system. In this manner, the external application would know ‘when its message is received by the transaction processing system’, ‘where that message is in the transaction processing process’, and whether that message needs to be ‘resubmitted’ due to a data or time-out error.” [col 3, L9-16]

Gilbert also teaches that an ‘acknowledgement subsystem’ component of his invention “queries the log file” to determine the ‘status’ of transaction processing or the received input message [col 4, L21-35]. Moreover, the Office remarks with emphasis that Gilbert expressly discloses not only whether processing of a message has been ‘completed’ but also whether the processing was ‘finished successfully’ or ‘finished in

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error' (e.g., "Control Record Finished Successfully" / "Control Record Finished in Error"), thus possibly requiring the resubmission of a received message. Applicant's argued feature "that a log can be accessed to determine if the message failed to process previously" is thus expressly taught by Gilbert.

Additionally, with regards to the claim, Applicant argues that the combination of Smith and Gilbert does not teach or disclose the recited feature of "in response to an identification that the message previously failed to process, logging a second state information to the log of state information indicating that the message is being de-featured according to a first rule". In particular, Applicant argues that while Gilbert discloses logging of messages, there is no indication within the cited art that the state information indicates that the message is being de-featured according to a first rule and no teaching or suggestion that the state information would change if a previous error were detected. Applicant also remarks that since Gilbert fails to discuss the defeaturing of messages in any manner, there is therefore no reason to expect such an indication to occur within the logs of Gilbert. The Office respectfully disagrees.

In response to the argument, the Office asserts once again that the recited feature of "de-featuring of messages according to rules" is expressly disclosed by Smith, as previously established, and the additional recited features of the logging of a first and/or second 'message status' or state information is expressly disclosed by the message Transaction Processing System of Gilbert's invention. With reference to

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Figure 5, for example, Gilbert expressly discloses browsing / querying Log File 122 for the 'status' of active control record 148 (for the message). In this regard, Gilbert expressly discloses various message "status" ("1", "2" or "3") that may be associated with the control record that is indicative of the current message "log state information". Gilbert also significantly teaches, for example, that a message control record 'status' of "8" indicates successful completion of the message processing, while a status of "9" indicates completion but with 'error' [col 15, L34-46]. Gilbert further teaches that the control record log state information is 'updateable' [col 8, L51-54]. Gilbert thus expressly provides a mechanism for the logging of 'log state information' of a message which can be used to determine the 'processing status' of a message in the transaction message process, as well as the logging of state information pertaining to the 'rules' for de-featuring a message as expressly disclosed by Smith.

With respect to the rejection of dependent claim 2, Applicant argues that the combination of Smith, Gilbert, and Callas fails to teach or disclose the claim elements of "attempting to process the message and logging state information to the log of state information indicating that message processing has started and logging state information indicating that the message successfully processed only in response to the message processing completing successfully". The Office respectfully disagrees.

In response to the argument, the Office notes that Gilbert expressly discloses as part of his invention that "the external application would know 'when its message is

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received by the transaction processing system', 'where that message is in the transaction processing process', and whether that message needs to be 'resubmitted' due to a *data or time-out error*." [col 3, L9-16] Gilbert thus discloses a message transaction processing system that knows 'what' the status of the message is with respect to message processing and 'where' the message is in the processing, at all times (i.e., message processing 'started' / 'finished'). This coupled with Gilbert's express disclosure of the capability to log, store, and query 'state information' to a log file / database sufficiently discloses the above argued feature, and the rejection of the claim is accordingly maintained.

Lastly, with regard to the rejection of dependent claim 34, Applicant argues that the combination of Smith in view of Gilbert does not teach or disclose the method of claim 1 further comprising "the act of 'scanning' the log state information in order to find messages that have not processed successfully in response to an 'event' comprising one of (1) system reboot, (2) process restart, or (3) thread restart. However, within the rejection of claim 34, there is no reference to a system reboot, a process restart, or a thread restart". Specifically, Applicant argues that although the interface of Gilbert is 'event-driven', the only example of what would constitute an event is the transmission of a message. Applicant also argues that Gilbert fails to discuss scanning the log of state information to find message that have not processed successfully. The Office respectfully disagrees and maintains that the above argued features are disclosed by Gilbert.

For example, Gilbert express discloses the argued feature of “scanning the log state information in order to find messages that have not processed ‘successfully’ [col 7, L42-45]. He also expressly and broadly discloses the recited feature of executing a ‘task’ in response to an ‘event’ (e.g., transmission of a message) and that his invention is ‘event-driven’ [col 8, L51-54]. In this regard, the Office maintains that while Gilbert discloses as one possible ‘event’ the transmission of a message, it is obvious to one of ordinary skill in the art that ‘events’ other than ‘message transmission’ may also initiate the execution of a task (such as scanning a log file / database for log state information), and these may include a system reboot, process restart, and/or thread restart.

Accordingly, the Office maintains its rejection of claims 1, 2 and 34, for at least the justifications and reasons provided with respect to the argued claim(s). The rejection of the claim set in view of Smith and Gilbert is thus accordingly maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-12, 24, and 26-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, U.S. Patent Publication US 2002/0152399 A1 in view of Gilbert et al (hereinafter Gilbert), U.S. Patent 5,530,848.

As per Claims 1 and 24, Smith in view of Gilbert discloses in a computer system with a message processor, a method of processing at least a portion of a message where an attempt to previously process the message failed, the method comprising the acts of:

logging state information corresponding to the message to a log of state information (Gilbert: Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1], wherein the state information identifies the status of the message at the time the state information was logged (Gilbert: e.g., Message processed 'successfully', 'with error', or 'awaiting to be processed') (Table 1) [col 8, L1-15] (Log File 128 'Status', such as Status "1"– "X") [Fig. 21]

accessing the log of state information and utilizing the state information logged for the message (Gilbert: e.g., Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1]; to identify whether the message previously failed to process (e.g., a 'Quarantined' Message or a message with 'Exploits' , 630 & 635) [Fig. 6]; and

in response to an identification that the message previously failed to process, logging a second state information to the log of state information indicating that the

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message is being de-featured according to a first rule (Gilbert: Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1], removing a portion of the message to increase the likelihood of the message processor being able to appropriately process the message (e.g., removing the 'exploits' 635) [Fig. 6]; and attempting to preprocess the message subsequent to removing the portion of the message [e.g., forwarding 'original' message or 'cleaned' message towards recipient 640) [Fig. 6].

While Smith discloses substantial features of the invention such as the method of claim 1 above, the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information, wherein the state information identifies the status of the message at the time the state information was logged (for example, 1st log state information, 2nd log state information, etc.); and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process are disclosed by Gilbert in a related endeavor.

Gilbert discloses as his invention a method and system for interfacing external processes to a *transaction processing system*. An interface system is provided that accepts input messages from external messages wherein the input messages are to be processed by the transaction processing system [Abstract] [col 3, L24-47]. Specifically, Gilbert discloses the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information

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(Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1], wherein the state information identifies the status of the message at the time the state information was logged (e.g., Message processed 'successfully', 'with error', or 'awaiting to be processed') (Table 1) [col 8, L1-15] (Log File 128 'Status', such as Status "1"– "X") [Fig. 21]; and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process (e.g., updating of control records 148 based on information whether processing of a message is 'complete)' [col 8, L47-57]

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smith's invention with the above said additional features , as disclosed by Gilbert, for the motivation of providing a method and system including an interface to a system that provides acknowledgment to external applications upon receipt of a message, and provides tracking and management of the message as it is processed through the transaction processing system [col 3, L4-20].

Claim 24 recites the same limitations as claim 1, are distinguished only by statutory category, and thus rejected on the same basis.

As per Claim 3, Smith discloses the method of claim 2, wherein the identifier is a hash of the message (i.e., hash) [0067].

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As per Claims 4 and 26, Smith discloses the method of claim 2, wherein the message is one of an e-mail message, SOAP message, messaging board post, web message, or instant message (e.g., email messages) [0003].

As per Claims 5 and 27, Smith in view of Gilbert discloses the method of claim 1, wherein the attempt to reprocess the message fails, the method further comprising the acts of:

logging a third state information to the log of state information indicating that the message is being de-featured according to a second rule (Gilbert : Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1] (e.g., Message processed ‘successfully’, ‘with error’, or ‘awaiting to be processed’) (Table 1) [col 8, L1-15] (Log File 128 ‘Status”, such as Status “1”– “X”) [Fig. 21]

removing a second portion of the message to increase the likelihood of the message processor being able to appropriately process the message (e.g., Exploit Remover 540) [Fig. 5] (635) [Fig. 6]; and

attempting to reprocess the message subsequent to removing the second portion of the message (e.g., Forwarding the “Cleaned” Message toward Recipient) (640) [Fig. 6].

While Smith discloses substantial features of the invention such as the method of claim 1 above, the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information, wherein the state information identifies the status of the message at the time the state information was logged (for example, 1st log state information, 2nd log state information, etc.); and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process are disclosed by Gilbert in a related endeavor.

Gilbert discloses as his invention a method and system for interfacing external processes to a *transaction processing system*. An interface system is provided that accepts input messages from external messages wherein the input messages are to be processed by the transaction processing system [Abstract] [col 3, L24-47]. Specifically, Gilbert discloses the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information (Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1], wherein the state information identifies the status of the message at the time the state information was logged (e.g., Message processed 'successfully', 'with error', or 'awaiting to be processed') (Table 1) [col 8, L1-15] (Log File 128 'Status', such as Status "1"– "X") [Fig. 21]; and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process (e.g., updating of control records 148 based on information whether processing of a message is 'complete') [col 8, L47-57]

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It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smith's invention with the above said additional features , as disclosed by Gilbert, for the motivation of providing a method and system including an interface to a system that provides acknowledgment to external applications upon receipt of a message, and provides tracking and management of the message as it is processed through the transaction processing system [col 3, L4-20].

As per Claims 6 and 28, Smith discloses the method of claim 5, wherein the message processing state information also includes information about the portion of the message removed (e.g., virus) [0004] (e.g., "message too long") [0066].

As per Claims 7 and 29, Smith discloses the method of claim 5, wherein the second portion of the message removed includes the portion of the message removed (e.g., header, body, attachment containing the 'exploit' or rule violation) [0066].

As per Claims 8 and 30, Smith discloses the method of claim 1, wherein the first rule is based on the type of content within the portion of the message removed (e.g., message field 'standards' / rules, such as 'permissible' length of the field and/or attachments 'permissible') [0066].

As per Claims 9 and 31, Smith discloses the method of claim 8, wherein the type of

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content within the portion of the message removed is one or more of an alternative format of the message, video data, audio data, image data, text, header information, or executable instructions (e.g., pictures, sound files, executable programs, etc.) [0003].

As per Claims 10 and 32, Smith discloses the method of claim 8, wherein the rules are defined by the transport protocol for the message, which is one of STMP, HTTP, TCP, UDP, or SOAP (i.e, HTTP) [0052].

As per Claim 11, Smith discloses the method of claim 8, wherein the rules are defined by content format MIME, and wherein the content of the portion of the message removed is one or more of a mixed multipart data, alternative multipart data, parallel multipart data, digest multipart data, application data, video data, audio data, image data, text, header information or the message itself (i.e., MIME) [0070].

As per Claim 12, Smith in view of Gilbert discloses the method of claim 2, wherein utilizing the state information logged for the message to identify whether the message previously failed to process comprises accessing the state information log and determining if state information exists indicating that the message successfully processed.

While Smith discloses substantial features of the invention such as the method of claim 1 above, the additionally recited features of the method further comprising logging

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state information corresponding to the message to a log of state information, wherein the state information identifies the status of the message at the time the state information was logged (for example, 1st log state information, 2nd log state information, etc.); and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process are disclosed by Gilbert in a related endeavor.

Gilbert discloses as his invention a method and system for interfacing external processes to a *transaction processing system*. An interface system is provided that accepts input messages from external messages wherein the input messages are to be processed by the transaction processing system [Abstract] [col 3, L24-47]. Specifically, Gilbert discloses the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information (Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1], wherein the state information identifies the status of the message at the time the state information was logged (e.g., Message processed 'successfully', 'with error', or 'awaiting to be processed') (Table 1) [col 8, L1-15] (Log File 128 'Status', such as Status "1"– "X") [Fig. 21]; and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process (e.g., updating of control records 148 based on information whether processing of a message is 'complete') [col 8, L47-57]

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smith's invention with the above said additional

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features , as disclosed by Gilbert, for the motivation of providing a method and system including an interface to a system that provides acknowledgment to external applications upon receipt of a message, and provides tracking and management of the message as it is processed through the transaction processing system [col 3, L4-20].

As per claim 33, Smith in view of Gilbert discloses the method of claim 1 further comprising the act of periodically scanning the log of state information in order to find messages that have not processed successfully.

While Smith discloses substantial features of the invention such as the method of claim 1 above, the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information, wherein the state information identifies the status of the message at the time the state information was logged (for example, 1st log state information, 2nd log state information, etc.); and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process are disclosed by Gilbert in a related endeavor.

Gilbert discloses as his invention a method and system for interfacing external processes to a *transaction processing system*. An interface system is provided that accepts input messages from external messages wherein the input messages are to be processed by the transaction processing system [Abstract] [col 3, L24-47]. Specifically, Gilbert discloses the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information

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(Log File 22 generated by Transaction Processing System Log File 128 /

Communications Log File 126) [Figure 1], wherein the state information identifies the status of the message at the time the state information was logged (e.g., Message processed 'successfully', 'with error', or 'awaiting to be processed') (Table 1) [col 8, L1-15] (Log File 128 'Status', such as Status "1"– "X") [Fig. 21]; and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process (e.g., updating of control records 148 based on information whether processing of a message is 'complete') [col 8, L47-57]. Gilbert additionally and expressly discloses the recited feature of 'periodically scanning the log of state information in order to find messages that have not processed successfully' (i.e., "...periodically examines the status of each message as it is being processed..." [Abstract] (i.e., "scanning log file 122") [col 8, L51-54]

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smith's invention with the above said additional features, as disclosed by Gilbert, for the motivation of providing a method and system including an interface to a system that provides acknowledgment to external applications upon receipt of a message, and provides tracking and management of the message as it is processed through the transaction processing system [col 3, L4-20].

As per claim 34, Smith in view of Gilbert discloses the method of claim 1 further comprising the act of scanning the log of state information in order to find messages

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that have not processed successfully in response to an event comprising one of (1) system reboot, (2) process restart, or (3) thread restart.

While Smith discloses substantial features of the invention such as the method of claim 1 above, the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information, wherein the state information identifies the status of the message at the time the state information was logged (for example, 1st log state information, 2nd log state information, etc.); and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process are disclosed by Gilbert in a related endeavor.

Gilbert discloses as his invention a method and system for interfacing external processes to a *transaction processing system*. An interface system is provided that accepts input messages from external messages wherein the input messages are to be processed by the transaction processing system [Abstract] [col 3, L24-47]. Specifically, Gilbert discloses the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information (Log File 22 generated by Transaction Processing System Log File 128 / Communications Log File 126) [Figure 1], wherein the state information identifies the status of the message at the time the state information was logged (e.g., Message processed 'successfully', 'with error', or 'awaiting to be processed') (Table 1) [col 8, L1-15] (Log File 128 'Status', such as Status "1"– "X") [Fig. 21]; and accessing the log of state information and utilizing the state information logged for the message to identify

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whether the message previously failed to process (e.g., updating of control records 148 based on information whether processing of a message is 'complete)' [col 8, L47-57].

Gilbert additionally and expressly discloses the recited feature of 'periodically scanning the log of state information in order to find messages that have not processed successfully' (i.e., "...periodically examines the status of each message as it is being processed..." [Abstract] (i.e., "scanning log file 122") [col 8, L51-54] (e.g., "...the interface system is *event-driven*") [Abstract] [col 7, L42-44].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smith's invention with the above said additional features, as disclosed by Gilbert, for the motivation of providing a method and system including an interface to a system that provides acknowledgment to external applications upon receipt of a message, and provides tracking and management of the message as it is processed through the transaction processing system [col 3, L4-20].

3. Claims 2 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, U.S. Patent Publication US 2002/0152399 A1 Gilbert et al (hereinafter Gilbert), U.S. Patent 5,530,848 and in further view of Callas et al (hereinafter Callas), U.S. Patent Publication US 2006/0015736 A1.

As per Claims 2 and 25, Smith in view of Gilbert and in further view of Callas discloses the method of claim 1, further comprising the acts of:

receiving the message (610) [Fig. 6];
generating an identifier for the message (Callas: e.g., 'message-id') [0048];
attempting to process the message, and logging state information to the log of state information indicating that message processing has started; and
logging state information indicating that the message successfully processed only in response to the message completing successfully .

While Smith discloses substantial features of the invention such as the method of claim 1 above, the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information, wherein the state information identifies the status of the message at the time the state information was logged (for example, 1st log state information, 2nd log state information, etc.); and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process are disclosed by Gilbert in a related endeavor.

Gilbert discloses as his invention a method and system for interfacing external processes to a *transaction processing system*. An interface system is provided that accepts input messages from external messages wherein the input messages are to be processed by the transaction processing system [Abstract] [col 3, L24-47]. Specifically, Gilbert discloses the additionally recited features of the method further comprising logging state information corresponding to the message to a log of state information (Log File 22 generated by Transaction Processing System Log File 128 /

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Communications Log File 126) [Figure 1], wherein the state information identifies the status of the message at the time the state information was logged (e.g., Message processed 'successfully', 'with error', or 'awaiting to be processed') (Table 1) [col 8, L1-15] (Log File 128 'Status', such as Status "1"– "X") [Fig. 21]; and accessing the log of state information and utilizing the state information logged for the message to identify whether the message previously failed to process (e.g., updating of control records 148 based on information whether processing of a message is 'complete') [col 8, L47-57]

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smith's invention with the above said additional features , as disclosed by Gilbert, for the motivation of providing a method and system including an interface to a system that provides acknowledgment to external applications upon receipt of a message, and provides tracking and management of the message as it is processed through the transaction processing system [col 3, L4-20].

Further, while the combination of Smith and Gilbert discloses substantial features of the invention such as the method of claim 1 above, the additionally recited feature of the method further comprising generating an identifier for the message is disclosed by Callas in a related endeavor.

Callas discloses as his invention a method and system of processing of messages in an electronic network; in particular, in relation to efficient techniques for the partial authentication of messages exchanged in an electronic network [Abstract]

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[0042]. Specifically, Callas discloses the additionally recited feature of the method further comprising generating an identifier for the message (e.g., 'message-id') [0048]

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Smith and Gilbert with the added feature of the method further comprising generating an identifier for the message, as disclosed by Callas, for the motivation of providing a method and system for inserting partial authentication content into a message which allows processing of the authentication content without processing the entire message [Abstract].

Conclusion

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Wallace Martin can be reached on 571-272-3440. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenford Madamba
Examiner
Art Unit 2151

/Kenny S Lin/

Primary Examiner, Art Unit 2152